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Reply to Office Action of July 8, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1.   (Currently Amended)   A computer system for automating communications between client devices and service provider devices linked to a data communications network, comprising:

a service provider device linked to the communications network including a repeatable conversion and connection mechanism for receiving coded streamed service requests, for converting [[the]] coded streamed service requests to at least one request document, and transmitting the at least one request document to a target service; and

a client device linked to the communications network including a client agent that creates a coded streamed service request and a coded conversion and connection mechanism that parses the coded streamed service request to identify the target service, that opens a communication connection with the service provider device, and that transmits the coded streamed service request over the communications network to the service provider device,

wherein the conversion and connection mechanism of the service provider is further configured for receiving a response document, for responsively opening a communication connection with the client device based on the coded streamed service requests, for converting the at least one request document to a request string in a repeatable manner based on the coded streamed service requests, for uniquely associating the conversion of the at least one request document with the client device based on the coded streamed service requests; and for

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streaming [[the]]a response string to the communication connection at the client device over the communications network;

wherein the service provider includes a response generator adapted to create the response document from a service response created by the target service wherein the creation of the response document is repeatable and uniquely associated with the client device based on the coded streamed service request; and

wherein the response document and the request document are in a formatted structure used by the service provider and by the client device.

Claim 2 (canceled)

3.   (previously presented) The computer system of claim 1, wherein the response string is streamed using a streaming protocol based on TCP/IP.

4.   (original) The computer system of claim 3, wherein the streaming protocol is selected from the group consisting of HTTP, HTTPS, and UDP.

Claims 5-6 (canceled)

7.   (previously presented) The computer system of claim 1, wherein the formatted structure is an eXtensible Markup Language (XML) document or a Standard Generalized Markup Language (SGML) document.

8.   (previously presented) The computer system of claim 1, wherein the conversion and connection mechanism of the client device is adapted for converting the streamed response string into an instance of the response document.

9.   (original) The computer system of claim 8, wherein the instance of the response document is in a formatted structure document and wherein the

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client device further includes a component for recognizing the formatted structure and converting the instance of the request document to a service response useable by the client agent.

10. (Currently Amended) A method for use in a service provider system for automating communication conversions and connections, comprising:

receiving, over a communications network from a client machine, a <u>coded</u> streamed service request for a target service;

converting the <u>coded</u> streamed service request into a request document;

transmitting the request document to the target service;

in response, receiving a response document from the target service;

converting the response document to a service response configured for streaming over the communications network <u>wherein converting the response document is repeatable and uniquely associated with the client machine</u>;

allocating a port on the client machine with a base networking protocol, wherein the client machine and the target service use a single connection; and

streaming the service response to the port of the client machine,

wherein the streamed service request converting includes verifying the client machine is an acceptable source of service requests and verifying validity of the request document by comparing Included data types in the request document with expected data definitions.

Claim 11 (canceled)

12. (original) The method of claim 10, wherein the request document and the response document are in a formatted structure common to the target service and the client machine.

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13.   (original) The method of claim 10, wherein the response document converting and the service response streaming are performed according to a streaming protocol based on TCP/IP.

14.   (original) The method of claim 10, further including converting the request document into a request object prior to the transmitting and creating the response document from a response object received from the target service prior to the response document receiving.

15.   (Currently Amended) A method for use in a service provider client-server network, comprising:

at a client device:

generating a service request document having a first form;

determining a data transfer protocol based on a service provider device identified in the service request document;

converting the service request document into a service string having a streaming form according to the data transfer protocol;

allocating a port on the client device based on a base networking protocol to establish a single communication connection with a service provider device identified in the service request document; and

transmitting the service string over a communications network to the communication connection at the service provider device; and

at the service provider device:

converting the service string into an instance of the service request document having the first form;

transmitting the instance to a target service;

receiving a response document based on the instance;

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converting the response document into a response string having a streaming form according to the data transfer protocol, wherein the data transfer protocol is associated with the client device and retained for further requests;

allocating a port on the client device to establish the communication connection with the client device; and

transmitting the response string over the communications network to the port at the client device.

16. (original) The method of claim 15, further including at the client device:

receiving the response string;

converting the response string into an instance of the response document; and

providing the instance of the response document to a client agent.

17. (original) The method of claim 16, wherein the first form and a form of the response document are in formatted structure common to the client device and the service provider device.

18. (original) The method of claim 15, wherein the data transfer document is streamed using a streaming protocol based on TCP/IP.

Claim 19 (canceled)